



MOTOROLA SOLUTIONS

en-US

RF Energy Exposure Training and Product Safety Information for
Portable Two-Way Radios

zh-CN

便携式双向对讲机的射频能量辐射培训与产品安全信息

https://learning.motorolasolutions.com/User_Documentation



Caution

Before using this radio, read this booklet which contains important operating instructions.

For information on product details, brochures, user manuals and approved accessories. Please refer to www.motorolasolutions.com.

Compliance with RF Exposure Standards

National and international regulations require manufacturers to comply with the RF energy exposure limits for portable two-way radios before they can be marketed. Your Motorola Solutions two-way radio is designed, manufactured, and tested to comply with all applicable national and international regulations for human exposure to radio frequency electromagnetic energy.

RF Energy Exposure Awareness and Control Information and Operational Instructions for General Population and Uncontrolled Environment Use

For more information on what RF energy exposure is, see the following websites:

- <https://www.fcc.gov/>
- <https://www.who.int/health-topics/electromagnetic-fields/>

For additional information, see <http://responsibility.motorolasolutions.com/index.php/ourapproach/wirelesscommhealth/>.

RF Exposure Compliance and Control Guidelines

- Do not remove any of the RF Exposure Labels if present from this device or its related accessories.
- Attach these instructions to the device when you transfer it to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions

- Transmit no more than 50% of the time. To transmit (talk), press the **Push-To-Talk (PTT)** button. To receive calls, release the **PTT** button.
- Hold the radio in a vertical position in front of the face with the microphone (and other parts of the radio including the antenna) at least 1 in. (2.5 cm) away from the nose or lips. Antenna should be kept away from the eye.
- When worn on the body, always place the radio in a Motorola Solutions-approved clip, holder, holster, case, or body harness for this product.
- DO NOT hold the antenna when the radio is transmitting.

- DO NOT use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.
- To ensure continued compliance with applicable RF exposure limits, use only Motorola Solutions approved, supplied or replacement antennas, batteries, and accessories.
- For a list of Motorola Solutions approved accessories please refer to your user manual or visit www.motorolasolutions.com

Acoustic Safety

Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the volume of the radio, the sooner your hearing will be affected. Hearing damage from loud noise is sometimes undetectable at first, and can have a cumulative effect.

To protect your hearing:

- Use the lowest volume necessary to do your job.
- Turn up the volume only if you are in noisy surroundings.
- Turn down the volume before adding headset or earpiece.
- Limit the amount of time you use headsets or earpieces at high volume.
- When using the radio without a headset or earpiece, do not place the radio's speaker directly against your ear.

Medical Devices

If you use a personal medical device, such as a pacemaker or hearing aid, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Holsters Incorporating Magnets

Some Motorola Solutions holsters incorporate strong, neodymium magnets. If you use a personal medical device, such as a pacemaker or hearing aid, consult the manufacturer of your device to determine if it can be used in close proximity to magnets. Your physician may be able to assist you in obtaining this information. Also be aware that magnets can damage other products, including cell phones, computers, hard drives, and other electronic devices, as well as credit cards and magnetic media. Keep the holster away from any mechanical device that could be affected by a magnetic field. Consult the manufacturer of your product to determine if your device or product can be used in close proximity to magnets.

Operational Warnings

The following explains the operational warnings:

For Vehicle With Air Bags



Warning:

- Refer to vehicle manufacturer's manual prior to installation of electronic equipment to avoid interference with air bag wiring.
- DO NOT place a portable radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres



Warning:

- Do not carry a radio that is not certified for Hazardous Locations into a potentially explosive atmosphere. It could result in a serious injury or death. You should only use a radio certified for hazardous locations in potentially explosive atmospheres.
- Explosive atmospheres refer to hazard classified locations that may contain hazardous gas, vapors, dusts, such as fueling areas below decks on boats, fuel or chemical transferor storage facilities, and areas where the air contains chemicals or particles such as grain, dust or metal powders. Areas with potentially explosive atmospheres are often, but not always, posted.
- DO NOT remove, install, or charge batteries in such areas, or remove or install antennas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Blasting Caps and Blasting Areas



Warning: To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio." Obey all signs and instructions.

Batteries



Caution: Use only Motorola Solutions approved batteries.

- Risk of explosion if the battery is replaced by an incorrect type.
- Charge your battery using the approved Motorola Solutions charger.

- Use the battery in accordance with its water and/or dust Ingress Protection (IP) rating.
- Do not discard your battery into a fire.
- Do not replace the battery in any area labeled "Hazardous Atmosphere".
- Do not disassemble, crush, puncture, shred, or otherwise attempt to change the form of your battery.
- Do not dry a wet or damp battery with an appliance or heat source, such as a hair dryer or microwave oven.
- Do not allow conductive material such as jewelry, keys, or beaded chains to touch exposed battery terminals.
- Do not dispose of batteries with household waste.

Safety Instructions for Power Supply

1. The power supply is for use with equipment according to IEC/EN/UL 62368-1/60950-1.
2. The power supply is for indoor use in dry locations.
3. The equipment shall be connected to a nearby and easily accessible socket outlet.
4. If the power supply is damaged or defective, do not repair or use the power supply.

Repair



Warning:

- Repairs to a Motorola Solutions Hazardous Location-Approved radio product certified by, for example, UL, CSA, CENELEC, should only be done at a location that has been audited under the certifying body's repair and service standard.
- Contact Motorola Solutions for assistance regarding repairs and service of Motorola Solutions Hazardous Location-Approved equipment.

A repair constitutes something done internally to the unit that would bring it back to its original condition.

Items not considered as repairs are those in which an action is performed on a unit which does not require the outer casing of the unit to be opened in a manner that exposes the internal electrical circuits of the unit.

Do Not Substitute Options or Accessories

The Motorola Solutions communications equipment certified as intrinsically safe by the approving agency (UL, CSA, CENELEC) is tested as a complete system which consists of the listed agency Approved portable, Approved battery, and Approved accessories or options, or both. This Approved portable and battery

combination must be strictly observed. There must be no substitution of items, even if the substitute has been previously Approved with a different Motorola Solutions communications equipment unit. Approved configurations are listed by the Approving Agency (UL, CSA, CENELEC).

The Hazardous Location-Approved Label affixed to radio refers to the intrinsically safe classification of that radio product, and the approved batteries that can be used with that system.

The manual part number referenced on the Hazardous Location-Approved Label identifies the approved Accessories and or options that can be used with that portable radio unit.

Using a non-Motorola Solutions-Hazardous Location-Approved battery and/or accessory with the Motorola Solutions approved radio unit will void the Hazardous Location approval of that radio unit.

European Union (EU) Waste of Electrical and Electronic Equipment (WEEE) Directive



The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trash bin label on the product (or the package in some cases). As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste. Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.

Notes

小心

在使用本对讲机之前，请阅读本手册中包含的重要操作说明。
有关产品详细信息、手册、用户手册和批准的附件信息，请参阅
www.motorolasolutions.com。

遵守射频辐射标准

国内和国际法规要求制造商符合便携式双向对讲机的射频能量辐射限制，否则不能上市销售。无论是在设计上、制造上还是在测试中，Motorola Solutions 双向对讲机都符合所有适用的国内和国际人体射频电磁辐射法规。

普通人群和不受控制环境应用要求的射频能量辐射常识、控制信息和操作说明

有关射频能量辐射的定义的更多信息，请参阅以下网站：

- <https://www.fcc.gov/>
- <https://www.who.int/health-topics/electromagnetic-fields/>

有关附加信息，请参阅 <http://responsibility.motorolasolutions.com/index.php/ourapproach/wirelesscommhealth/>。

射频辐射合规性和控制准则

- 如果此设备或其相关附件中存在任何射频辐射标签，请勿取下这些标签。
- 将设备转让给其他用户时，请将这些说明附加到设备。
- 在不符合本文所描述的操作要求时，请勿使用此设备。

操作说明

- 传输时间不要超过总时间的 50%。传输（即讲话）时按下**通话按键 (PTT)** 按钮。接听时松开 **PTT** 按钮。
- 将对讲机竖直放在面前，麦克风（以及包括天线在内的其他对讲机部件）至少距离鼻子或嘴唇 1 英寸（即 2.5 厘米）。天线应远离眼睛。
- 对于随身携带的对讲机而言，务必将对讲机放在 Motorola Solutions 针对此产品批准的夹具、固定装置、皮套、盒子或其他套具中。
- 请勿在对讲机正在传输时握住天线。
- 请勿使用天线已经损坏的便携式对讲机。如果损坏的天线与您的皮肤接触，会引起轻度灼伤。
- 为了确保持续符合适用的射频辐射限制，请仅使用 Motorola Solutions 批准、供应的天线或替换天线、电池和附件。
- 有关 Motorola Solutions 批准的附件列表，请参阅用户手册或访问 www.motorolasolutions.com

声音安全

长时间接触任何来源的响亮噪音可能会暂时或永久影响您的听力。对讲机的音量越大，您的听力受到影响的速度就越快。响亮噪音对听力的损害有时在初期无法检测，并会有累积效果。

为了保护您的听力，请遵循以下提示：

- 使用完成工作所需的最低音量。
- 仅在嘈杂环境下才调高音量。
- 先调低音量，然后再添加耳机或听筒。
- 限制在高音量下使用耳机或听筒的时间。
- 使用不带耳机或听筒的对讲机时，请勿将对讲机的扬声器直接对着耳朵。

医疗设备

如果您使用个人医疗设备，如心脏起搏器或助听器，请咨询您设备的制造商，确定这些设备是否能够有效屏蔽射频能量。您的医生可能也可帮您确认此类信息。

采用磁铁的皮套

某些 Motorola Solutions 皮套采用了强大的钕磁铁。如果您使用个人医疗设备，如心脏起搏器或助听器，请咨询您的设备制造商，确定这些设备是否可以在靠近磁铁的地方使用。您的医生可能也可帮您确认此类信息。还要注意，磁铁会损坏其他产品，包括手机、电脑、硬盘驱动器和其他电子设备，以及信用卡和磁性介质。让皮套远离任何可能会受磁场影响的机械设备。请咨询您的产品制造商，确定您的设备或产品是否可以在靠近磁铁的地方使用。

操作警告

下面介绍操作警告：

针对带气囊的车辆



警告：

- 在安装电子设备前，请参阅汽车制造商手册以避免对气囊线路产生干扰。
- 请勿将便携式对讲机放在气囊上方或气囊展开时占用的区域内，因为气囊膨胀时会产生巨大的力量。如果便携式对讲机安装在气囊展开时占用的区域内，当气囊展开时，对讲机可能会被其产生的巨大力量所弹起，从而导致让车辆乘客受重伤。

可能会发生爆炸的环境



警告：

- 请勿将未经认证可用于危险位置的对讲机带入可能会发生爆炸的环境中。否则可能会导致严重的人身伤害或死亡。在可能会发生爆炸的环境中只能使用经过认证可用于危险位置的对讲机。
- 爆炸环境是指归入危险类别的位置，其中可能包含危险气体、蒸汽、灰尘，如轮船甲板下面的加油区域，燃油或化学物质运输或储存区域，以及空气中包含化学物质或者颗粒、灰尘或金属粉末等颗粒物的区域。含有可能会发生爆炸的环境的区域通常会张贴告示说明，但并非所有这类区域都有警示标志。
- 请勿在这些区域拆装电池或给电池充电，或者拆装天线。可能会发生爆炸的环境中产生火花会引起爆炸或火灾，从而造成人身伤害或甚至死亡。

引信和爆破区域



警告: 为了避免对爆破操作可能造成的干扰，请您在爆破区域内靠近电引信时关掉您的对讲机；在那些贴有“关掉双向对讲机”字样的地方，您也要关掉产品。请严格遵守所有标志和说明。

电池



小心: 请仅使用 Motorola Solutions 批准的电池。

- 如果更换为错误类型的电池，则存在爆炸风险。
- 使用经批准的 Motorola Solutions 充电器对电池进行充电。
- 使用电池时，必须遵守电池的防水和/或防尘入口防护 (IP) 额定值。
- 请勿将电池丢入火中。
- 请勿在任何标有“危险环境”的区域中更换电池。
- 请勿拆卸、挤压、刺穿、切割电池或以其他方式试图更改电池的形状。
- 请勿使用电器或热源（例如吹风机或微波炉）烘干潮湿或湿润的电池。
- 请勿让导电物质（例如珠宝、钥匙或珠链）接触暴露在外面的电池端子。
- 请勿将电池与生活垃圾一起处置。

电源安全说明

1. 电源适用于搭配符合 IEC/EN/UL 62368-1/60950-1 的设备使用。
2. 电源适用于室内干燥场所。
3. 设备应连接到位于附近且插拔方便的插座。
4. 如果电源损坏或有缺陷，请勿维修或使用电源。

维修



警告:

- 要维修通过 UL、CSA、CENELEC 等认证的 Motorola Solutions 危险位置认证的对讲机产品，只能在根据认证机构的维修和服务标准审核通过的位置进行维修。
- 有关 Motorola Solutions 危险位置认证的设备的维修和服务，请联系 Motorola Solutions 以获得帮助。

对装置的内部元器件进行维修会使其恢复原始状态。

对装置进行操作而那些无需打开装置外壳，使其内部电路暴露在外情况，不应被视为维修。

请勿替换选件或附件

Motorola Solutions 通信设备的本质安全性能是作为整体通过认证机构 (UL、CSA、CENELEC) 认证的，其中包括由上述机构认证的便携式对讲机、电池以及附件或选件，或两者兼具。此经认证的手持式对讲机和电池的组合必须严格保持，不得使用任何附件替代 (即使用于替代的附件过去曾被认证作为 Motorola Solutions 其他通信产品的附件)。认证机构 (UL、CSA、CENELEC) 列出了经认证的配置。

对讲机上粘贴的危险位置认证标签标明了该对讲机产品的本质安全分类和该系统可以使用的经认证电池。

危险位置认证标签上引用的手册部件号表明该便携式对讲机装置可以使用的经认证附件和/或选件。

对 Motorola Solutions 认证的对讲机装置使用非 Motorola Solutions 危险位置认证的电池和/或附件，将使该对讲机装置的危险位置认证无效。

欧盟 (EU) 废弃电子电气设备 (WEEE) 指令



欧盟的 WEEE 指令要求销售到欧盟国家/地区的产品必须在产品上 (有时是在包装上) 粘贴带叉号的垃圾箱标签。根据 WEEE 指令的定义，此带叉号的垃圾箱标签表示欧盟国家/地区的客户和最终用户不得将此电子电气设备或附件作为生活垃圾处置。欧盟国家/地区的客户或最终用户应联系当地的设备供应商代表或服务中心，以了解有关各个国家/地区废物收集系统的相关信息。

Notes

Notes

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners.

© 2017 and 2023 Motorola Solutions, Inc. All rights reserved.



Printed in



MN004534A01-AD